# ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 51 and 96

[OAR 2003-0053; FRL - ]

RIN 2060 -

Rule to Reduce Interstate Transport of Fine Particulate
Matter and Ozone (Clean Air Interstate Rule):
Reconsideration

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice of reconsideration; request for comment; notice of public hearing.

Register the final "Rule to Reduce Interstate Transport of Fine Particulate Matter and Ozone" (Clean Air Interstate Rule or CAIR). The CAIR requires certain upwind States to reduce emissions of nitrogen oxides (NOx) and/or sulfur dioxide (SO2) that significantly contribute to nonattainment of, or interfere with maintenance by, downwind States with respect to the fine particle and/or 8-hour ozone national ambient air quality standards (NAAQS). Subsequently, EPA received 11 petitions for reconsideration of the final rule. In this notice, EPA is announcing its decision to reconsider four specific issues in the CAIR and is requesting comment on those issues.

The EPA is seeking comment only on the aspects of the CAIR specifically identified in this notice. We will not respond to comments addressing other provisions of the CAIR or any related rulemakings.

DATES: Comments must be received on or before January 13, 2006. Because of the need to resolve the issues in this document in a timely manner, EPA will not grant requests for extensions of the public comment period. A public hearing will be held on December 14, 2005 in Washington, D.C. For additional information on the public hearing, see the SUPPLEMENTARY INFORMATION section of this preamble.

ADDRESSES: Submit your comments, identified by Docket ID No. OAR-2003-0053, by one of the following methods:

- Federal Rulemaking Portal: <a href="http://www.regulations.gov">http://www.regulations.gov</a>. Follow the on-line instructions for submitting comments. Attention E-Docket No. OAR-2003-0053.
- Agency Website: <a href="http://www.epa.gov/edocket">http://www.epa.gov/edocket</a>. EDOCKET, EPA's electronic public docket and comment system, is EPA's preferred method for receiving comments. Follow the on-line instructions for submitting comments. Attention E-Docket No. OAR-2003-0053.
- E-mail: <u>A-and-R-Docket@epa.gov.</u> Attention E-Docket No. OAR-2003-0053.
- Fax: The fax number of the Air Docket is (202) 566-

- 1741. Attention E-Docket No. OAR-2003-0053.
- Mail: EPA Docket Center, EPA West (Air Docket),
   Attention E-Docket No. OAR-2003-0053, Environmental
   Protection Agency, Mail Code: 6102T, 1200 Pennsylvania
   Ave., NW., Washington, D.C. 20460.
- Hand Delivery: EPA Docket Center (Air Docket), Attention E-Docket No. OAR-2003-0053, Environmental Protection Agency, 1301 Constitution Avenue, N.W., Room B102; Washington, D.C. Such deliveries are only accepted during the Docket's normal hours of operation, and special arrangements should be made for deliveries of boxed information.

Instructions: Direct your comments to Docket ID No. OAR-2003-0053. The EPA's policy is that all comments received will be included in the public docket without change and may be made available on-line at <a href="http://www.epa.gov/edocket">http://www.epa.gov/edocket</a>, including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through EDOCKET, regulations.gov, or e-mail. (For instructions on submitting CBI, see below under SUPPLEMENTARY INFORMATION.)

The EPA EDOCKET and the federal regulations.gov websites are "anonymous access" systems, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an e-mail comment directly to EPA without going through EDOCKET or regulations.gov, your e-mail address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD-ROM you submit. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses. For additional information about EPA's public docket visit EDOCKET on-line or see the Federal Register of May 31, 2002 (67 FR 38102). For additional information on submitting comments, go to the SUPPLEMENTARY INFORMATION section of this document.

Docket: All documents in the docket are listed in the EDOCKET index at <a href="http://www.epa.gov/edocket">http://www.epa.gov/edocket</a>. Although listed in the index, some information is not publicly

available, i.e., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically in EDOCKET or in hard copy at the EPA Docket Center (Air Docket), EPA/DC, EPA West, Room B102, 1301 Constitution Ave., N.W., Washington, D.C. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566-1742 and the fax number is (202) 566-1741.

FOR FURTHER INFORMATION CONTACT: For general questions concerning today's action, please contact Carla Oldham, U.S. EPA, Office of Air Quality Planning and Standards, Air Quality Strategies and Standards Division, Mail Code C539-02, Research Triangle Park, NC 27711, phone number (919) 541-3347, e-mail address oldham.carla@epa.gov. For questions concerning the analyses described in section III of this notice, please contact Chitra Kumar, U.S. EPA, Office of Atmospheric Programs, Clean Air Markets Division, Mail Code 6204J, 1200 Pennsylvania Avenue, NW., Washington, DC, 20460, telephone (202) 343-9128, e-mail address kumar.chitra@epa.gov. For legal questions, please contact

Sonja Rodman, U.S. EPA, Office of General Counsel, Mail Code 2344A, 1200 Pennsylvania Avenue, NW., Washington, DC, 20460, telephone 202-564-4079, e-mail address <a href="mailto:rodman.sonja@epa.gov">rodman.sonja@epa.gov</a>. For information concerning the public hearing, please contact Jo Ann Allman, U.S. EPA, Office of Air Quality Planning and Standards, Air Quality Strategies and Standards Division, Mail Code C539-02, Research Triangle Park, NC 27711, phone number (919) 541-1815, e-mail address allman.joann@epa.gov.

#### SUPPLEMENTARY INFORMATION:

Does this Action Apply to Me? The CAIR does not directly regulate emissions sources. Instead, it requires States to develop, adopt, and submit SIP revisions that would achieve the necessary SO2 and NOx emissions reductions, and leaves to the States the task of determining how to obtain those reductions, including which entities to regulate.

Public Hearing. On December 14, 2005, EPA will hold a public hearing on today's notice at EPA Headquarters, 1310 L Street (closest cross street is 13th Street), 1st floor conference rooms 152 and 154, Washington, D.C. The closest Metro stop is McPherson Square (Orange and Blue lines) -- take 14th Street/Franklin Square Exit. Because the hearing will be held at a U.S. government facility, everyone planning to attend should be prepared to show valid picture

identification to the security staff in order to gain access to the meeting room.

The hearing will begin at 9:00 a.m. and end at 12:00 noon. Persons wishing to speak at the public hearing should contact Jo Ann Allman by December 9 at telephone number (919) 541-1815 or by e-mail at allman.joann@epa.gov. The hearing will be limited to the subject matter of this document. Oral testimony will limited to 5 minutes. The EPA encourages commenters to provide written versions of their oral testimonies either electronically (on computer disk or CD-ROM) or in paper copy. The public hearing schedule, including the list of speakers, will be posted on EPA's website at: www.epa.gov/cair. Verbatim transcripts and written statements will be included in the rulemaking docket.

The public hearings will provide interested parties the opportunity to present data, views, or arguments concerning the proposed rules. The EPA may ask clarifying questions during the oral presentations, but will not respond to the presentations or comments at that time. Written statements and supporting information submitted during the comment period will be considered with the same weight as any oral comments and supporting information presented at a public hearing.

### What Should I Consider as I Prepare My Comments for EPA?

Note that general instructions for submitting comments are provided above under the ADDRESSES section. Submitting CBI. Do not submit comments that include CBI to EPA through EDOCKET, regulations.gov or e-mail. Clearly mark the part or all of the information that you claim to be CBI. For CBI information in a disk or CD ROM that you mail to EPA, mark the outside of the disk or CD ROM as CBI and then identify electronically within the disk or CD ROM the In addition to specific information that is claimed as CBI. one complete version of the comment that includes information claimed as CBI, a copy of the comment that does not contain the information claimed as CBI must be submitted for inclusion in the public docket. Information so marked will not be disclosed except in accordance with procedures set forth in 40 CFR part 2. Send or deliver information identified as CBI only to the following address: Roberto Morales, U.S. EPA, Office of Air Quality Planning and Standards, Mail Code C404-02, Research Triangle Park, NC 27711, telephone (919) 541-0880, e-mail at morales.roberto@epa.gov, Attention Docket ID No. OAR-2003-0053.

Tips for Preparing Your Comments. When submitting comments, remember to:

- i. Identify the rulemaking by docket number and other identifying information (subject heading, <u>Federal Register</u> date and page number).
- ii. Follow directions The agency may ask you to respond to specific questions or organize comments by referencing a Code of Federal Regulations (CFR) part or section number.
- iii. Explain why you agree or disagree; suggest alternatives and substitute language for your requested changes.
- iv. Describe any assumptions and provide any technical information and/or data that you used.
- v. If you estimate potential costs or burdens, explain how you arrived at your estimate in sufficient detail to allow for it to be reproduced.
- vi. Provide specific examples to illustrate your concerns, and suggest alternatives.
- vii. Explain your views as clearly as possible, avoiding the use of profanity or personal threats.
- viii. Make sure to submit your comments by the comment period deadline identified.

# Availability of Related Information

Documents related to the CAIR are available for inspection in docket OAR-2003-0053 at the address and times given above. The EPA has established a website for the CAIR

at <a href="http://www.epa.gov/cleanairinterstaterule">http://www.epa.gov/cleanairinterstaterule</a> or more simply http://www.epa.gov/cair/.

#### Outline

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# I. Background

On May 12, 2005, the EPA (Agency or we) promulgated the final "Rule to Reduce Interstate Transport of Fine

Particulate Matter and Ozone" (Clean Air Interstate Rule or CAIR)(70 FR 25162). In this action, EPA found that 28

States and the District of Columbia contribute significantly to nonattainment of, or interfere with maintenance by, downwind States with respect to the NAAQS for fine particles (PM2.5) and/or 8-hour ozone. The CAIR requires these upwind States to revise their State implementation plans (SIPs) to include control measures to reduce emissions of SO2 and/or NOx. Sulfur dioxide is a precursor to PM2.5 formation and NOx is a precursor to PM2.5 and ozone formation. By reducing upwind emissions of SO2 and NOx, CAIR will assist downwind PM2.5 and 8-hour ozone nonattainment areas in achieving the NAAQS.

The EPA promulgated the CAIR based on the "good neighbor" provision of the Clean Air Act (CAA), section 110(a)(2)(D), which establishes State obligations to address interstate transport of pollution. The EPA conducted extensive air modeling to determine the extent to which emissions from certain upwind States were impacting downwind nonattainment areas. All States found to contribute significantly to downwind PM2.5 nonattainment or maintenance problems are included in the CAIR region for PM2.5 and are required to reduce annual emissions of SO2 and NOx. All States found to contribute significantly to downwind 8-hour ozone nonattainment are included in the CAIR region for ozone and required to reduce NOx emissions during the 5-

month ozone season (May-September). The CAIR establishes regional emission reduction requirements for annual SO2 and NOx emissions and seasonal NOx emissions. The reduction requirements are based on control technologies known to be highly cost effective for electric generating units (EGUs). The first phase of NOx reductions starts in 2009 (covering 2009-2014) and the first phase of SO2 reductions starts in 2010 (covering 2010-2014). The second phase of both SO2 and NOx reductions starts in 2015 (covering 2015 and thereafter).

Each State covered by CAIR may independently determine which emission sources to control, and which control measures to adopt. States that choose to base their programs on emissions reductions from EGUs may allow their EGUs to participate in an EPA-administered cap and trade program. The CAIR includes model rules for multi-State cap and trade programs for annual SO2 and NOx emissions, and seasonal NOx emissions. States may choose to adopt these rules to meet the required emissions reductions in a flexible and highly cost-effective manner. To learn more about the CAIR and its impacts, the reader is encouraged to read the preamble to the CAIR (70 FR 25162; May 10, 2005).

The CAIR was promulgated through a process that involved significant public participation. The EPA

published a notice of proposed rulemaking on January 30, 2004 (69 FR 4566) and a notice of supplemental rulemaking on June 10, 2004 (69 FR 32684). The EPA also published a notice of data availability on August 6, 2004 (69 FR 47828). The Agency held public hearings on the January 2004 proposed rule on February 25 and 26, 2004, and an additional hearing on the supplemental proposal on June 3, 2004. In addition, the EPA received thousands of comments on the proposals. We responded to all significant public comments in the preamble to the final rule and the final response to comments document available in the CAIR docket (Docket No. OAR-2003-0053-2172).

Following publication of the final rule on May 12, 2005, the Administrator received eleven petitions requesting reconsideration of certain aspects of the final CAIR. These petitions were filed pursuant to section 307(d)(7)(B) of the CAA. Under this provision, the Administrator is to initiate reconsideration proceedings if the petitioner can show that an objection is of central relevance to the rule and that it was impracticable to raise the objection to the rule within the public comment period or that the grounds for the objection arose after the public comment period but before the time for judicial review had run. The petitions for reconsideration of the CAIR ask EPA to reconsider several

specific aspects of the final rule, and many of the petitions make similar requests. This notice addresses four of the issues raised in those petitions. The EPA expects to issue decisions on all remaining issues raised in the petitions for reconsideration by March 15, 2006. The complete petitions are available in the docket for the CAIR.<sup>1</sup>

In addition, fourteen petitions for judicial review of the final rule were filed with the U.S. Court of Appeals for the District of Columbia.<sup>2</sup> The fourteen cases have been

<sup>1</sup> Petitions for reconsideration were filed by: State of North Carolina (OAR-2003-0053-2192); FPL Group (OAR-2003-0053-2201); Florida Association of Electric Utilities (OAR-2003-0053-2200); Entergy Corporation (OAR-2003-0053-2195 and 2198 (attachment 1)); Massachusetts Department of Environmental Protection (OAR-2003-0053-2199); Integrated Waste Services Association (OAR-2003-0053-2193); Texas Commission on Environmental Quality (OAR-2003-0053-2212); Northern Indiana Public Service Corporation (OAR-2003-0053-2194 and 2213 (supplemental petition)); City of Amarillo, Texas, El Paso Electric Company, Occidental Permian Ltd, and Southwestern Public Service Company d/b/a/ Xcel Energy (OAR-2003-0053-2196 and 2197 (attachment 1) and 2205-2207 (attachments 2-4)); Connecticut Business and Industry Ass'n (OAR-2003-0053-2203); and Minnesota Power, a division of ALLETE. Inc. (OAR-2003-0053-2212).

<sup>2</sup> State of North Carolina v. EPA (No. 05-1244); Minnesota
Power v. EPA (No. 05-1246); ARIPPA v. EPA (No. 05-1249);
South Carolina Public Service Authority et al. v. EPA (No.
05-1250); Entergy Corp. v. EPA (No. 05-1251); Florida Ass'n
of Electric Utilities (No. 05-1252); FPL Group v. EPA (No.
05-1253); Northern Indiana Public Service Co. v. EPA (No.
05-1254); South Carolina Electric & Gas Co. v. EPA (No. 051256); Integrated Waste Services Ass'n v. EPA (No. 05-1257);
AES Corp v. EPA (No. 05-1259); City of Amarillo, Texas et
al. v. EPA (No. 05-1260); Appalachian Mountain Club et al.

consolidated into a single case, State of North Carolina v.

EPA (No. 05-1244) (D.C. Cir). Many of the parties who petitioned EPA for reconsideration of the CAIR also petitioned for judicial review of the rule.

By letters dated August 1, 2005, EPA granted reconsideration of the definition of "electric generating unit" or "EGU" as it relates to solid waste incinerators (and particularly municipal waste incinerators).3 explained that the issue would be addressed in the proposed rule signed the same day. That proposed rule, entitled "Rulemaking on Section 126 Petition from North Carolina to Reduce Interstate Transport of Fine Particulate Matter and Ozone; Federal Implementation Plans to Reduce Interstate Transport of Fine Particulate Matter and Ozone; Revisions to the Clean Air Interstate Rule; Revisions to the Acid Rain Program; Proposed Rule, was published on August 24, 2005 (70 FR 49708). In that proposed rule, EPA reconsidered the definition of "EGU" in the final CAIR is it relates to solid waste incinerators (70 FR 49738). We proposed revisions to the definition of "EGU" and requested comment on this issue. In that action, we did not address any other issues raised in the petitions for reconsideration of the CAIR.

v. EPA (No. 05-1246 ); Duke Energy v. EPA (No. 05-1246).

action does not reopen for comment any aspect of the August 24, 2005 proposed rule.

The EPA also received two requests to stay the implementation of the CAIR in limited geographic areas pending resolution of this reconsideration process. One petitioner requested a stay of implementation of the CAIR in the State of Florida, and one petitioner requested a stay of implementation of the CAIR in the State of Minnesota. By letter dated August 1, 2005, EPA declined to stay implementation of the CAIR in Florida. The EPA has not yet acted on the request to stay implementation of the CAIR in Minnesota.

By letters dated November 21, 2005, we informed several petitioners of our intent to grant reconsideration on one or more issues addressed in their petitions for reconsideration. We indicated in those letters that we would initiate the reconsideration process by publishing this notice.

# II. Today's Action

#### A. Grant of Reconsideration

In this notice, EPA is announcing its decision to grant

 $<sup>^{3}</sup>$  These letters are available in the CAIR Docket. (OAR-2003-0053-2209 and 2210).

<sup>&</sup>lt;sup>4</sup> This letter is also available in the CAIR Docket (OAR-2003-0053-2208).

reconsideration on four issues raised in the petitions for reconsideration. This notice initiates that reconsideration process and requests comment on the issues to be addressed. Given the intense public interest in this rule, EPA has decided to provide this additional opportunity for public comment. At this time, however, EPA does not believe that any of the information submitted to date demonstrates that EPA's final decisions were erroneous or inappropriate. Therefore, we are not proposing any modifications to the final CAIR.

The first issue on which EPA is requesting comment relates to analysis done by EPA to address petitioner's claims regarding alleged inequities resulting from the application of the SO2 allowance allocation methodology that States choosing to participate in the trading program would use to allocate SO2 allowances to sources. The second issue relates to EPA's use of specific fuel adjustment factors to establish NOx budgets for each State. The third issue relates to modeling inputs used by EPA to determine whether emissions from Minnesota should be included in the CAIR region for PM2.5. And the fourth issue relates to EPA's determination that the State of Florida should be included in the CAIR region for ozone. Each issue is described in greater detail in Section III of this notice.

The EPA is requesting comment only on the issues specifically described in Section III. We are not taking comment on any other provisions in the CAIR or otherwise reopening any other issues decided in the CAIR for reconsideration or comment.

#### B. Schedule for Reconsideration

For the four issues addressed in this notice, EPA expects to take final action on reconsideration by March 15, 2006. By that date, EPA will finalize the process of reconsideration by issuing a final rule or proposing a new approach. EPA also expects, by March 15, 2006, to issue decisions on all remaining issues raised in the petitions for reconsideration.

#### III. Discussion of Issues

# A. SO2 Allocation Methodology in the CAIR Model Trading

One petitioner argues that the SO2 allowance allocation methodology in the CAIR model trading rules is unreasonable and inequitable, and asks EPA to establish a different approach. According to the petitioner, the methodology is inequitable because it results in owners of units that have lower emission rates, historically, buying allowances from historically higher emitting units that install new emission controls. EPA does not accept the petitioner's

characterization of this issue. EPA continues to believe that the methodology selected is reasonable for the reasons explained in the final rule and further outlined below. Furthermore, numerous opportunities for public comment on this issue were provided, and a full discussion of the allowance allocation options occurred during the rule development process. Nonetheless, given the intense public interest in this issue, EPA has decided to grant the Petition for Reconsideration insofar as it raises issues regarding alleged inequities resulting from the application of the SO2 allowance allocation.

As explained below, EPA has conducted additional analyses concerning the impact of the SO2 allowance allocation approach adopted in the model rules, comparing this approach to various other alternatives considered during the rulemaking process. These analyses further illustrate that the approach selected produces a reasonable result, not the inequities alleged in the Petition for Reconsideration. Therefore EPA is not proposing any changes to the CAIR SO2 allocation approach as part of this reconsideration notice. We are taking comment on the analyses conducted and our discussion of the petitioner's concerns.

# Title IV and CAIR

The CAIR model SO2 trading program relies on the use of title IV SO2 allowances for compliance with the allowance-holding requirements of CAIR. Title IV SO2 allowances have already been allocated on a unit-by-unit basis in perpetuity, based on formulas set forth in section 405 and 406 of title IV, which were implemented through final regulations issued in 1998 (Sec 42 U.S.C. 7651d and 7651e; and 18 CFR 73.10(b)). The statutory formula for SO2 allocations was generally based on unit data for 1985-1987 and, for some units, data for years up to 1995. For the title IV SO2 trading program, each allowance authorizes one ton of SO2 emissions.

For the CAIR SO2 trading program, SO2 reductions would be achieved by generally requiring CAIR sources to retire more than one title IV allowance for each ton of their SO2 emissions for 2010 and thereafter. Specifically, each title IV SO2 allowance issued for 2009 or earlier would be used for compliance by CAIR sources at a ratio of one allowance per ton of SO2 emissions and would authorize one ton of SO2 emissions. Each title IV allowance of vintage 2010 through 2014 would be used for compliance under CAIR at a two-to-one ratio and authorize 0.5 tons of SO2 emissions. Each title IV allowance of vintage 2015 and later would be used at a 2.86-to-1 ratio and authorize 0.35 tons of SO2 emissions.

See discussion in the preamble to the final CAIR in section VII (70 FR 25255-25273) and section IX (70 FR 25290-25291). SO2 Allocation Options in CAIR

A variety of SO2 allowance allocation methodologies were raised and analyzed during the rulemaking process, including the one EPA selected. Alternative methodologies analyzed included allocating on the basis of historic tonnage emissions, heat input (with alternatives based on heat input from all fossil generation, and heat input from coal- and oil-fired generation only) and output (with alternatives based on all generation and all fossil-fired generation). While every allocation methodology suggested by commenters during the rulemaking process has its advantages and disadvantages for different companies and States, EPA explained in the final rule that its chosen methodology is reasonable on several grounds. First, EPA believes that "achieving SO2 reductions for EGUs using the title IV allowances is necessary in order to ensure the preservation of a viable title IV program" (Response to Comments (RTC) at page 511, section X.A.26, 2005). See also discussion in preamble to the final CAIR in section IX (70 FR 25290-25291). Second, in using the title IV allowances, EPA relied on the selection by Congress of the permanent allocation methodology established in title IV for purposes

of reducing SO2 emissions. As stated in the RTC (page 512), "Congress clearly did not choose a policy to regularly revisit and revise these allocations, believing that its allocations methodology for title IV allowances would be appropriate for future time periods."

Third, title IV allowance allocations provide a logical and well understood starting point from which additional EGU SO2 emission reductions can be achieved for Acid Rain units, which account for over 90% of the SO2 emissions from CAIR EGUs. Finally, EPA's State-by-State analysis of several methods for SO2 allocations shows that the use of title IV allowances to develop state budgets creates a reasonable result (See RTC, section X.A.26). The policy decision to base the CAIR SO2 budgets on the existing title IV allowance system, and EPA's demonstration that the result of using the system is reasonable fully support the use of an allocation system based on title IV allowances.

# Analysis of SO2 Allocation Options

As a part of this reconsideration, EPA performed additional analyses, explained below, to evaluate the SO2 allocation methodology in the final CAIR rule in light of the petitioner's concerns. In these analyses, EPA compared three alternative SO2 allowance allocation methodologies to the methodology in the final CAIR to see how companies fared

in terms of the amount of allowances allocated relative to their projected SO2 emissions. The allocation allowance methodologies evaluated by EPA were the ones referred to by the petitioner in the Petition for Reconsideration. EPA believes that, for purposes of evaluating the various allocation methodologies, computing allocations on a company-by-company basis is more appropriate than comparing allocations on a unit-by-unit basis. This is because, while one unit could be allocated fewer allowances under one methodology, another unit owned by the same company could be allocated more allowances, which may offset the smaller allocation of the first unit.

The three alternative allowance allocation methodologies EPA analyzed were suggested by various commenters during the rulemaking process. Also note that methodologies 2 and 3 were suggested by the petitioner. These methodologies are:

- Allocating allowances based on more recent heat input data;
- Allocating allowances based on more recent heat input data adjusted for fuel type (e.g. coal, oil and gas);
- 3. Allocating allowances based on more recent heat input data adjusted both for fuel type

(e.g. coal, oil and gas) and for coal type
(e.g. bituminous, sub-bituminous and lignite).

In comparing the CAIR final SO2 allocation methodology and the three alternative methodologies, EPA took into account certain factors that are applicable to the CAIR final allocation methodology but not to the three alternative methodologies. For all four methodologies, EPA analyzed the resulting total allowance allocations, and the total projected emissions, for companies' sources located in the States subject to CAIR. In addition, for all the methodologies, EPA analyzed the relationship between allowances and emissions in two ways. In the first, EPA calculated the ratio of allowances to total projected emissions before CAIR controls (base case). This measures how much each company falls short of allowance needs. in the second approach, EPA calculated the ratio of allowances to total projected emissions with CAIR controls installed (control case). This way measures how many allowances a company would need to purchase after controls are installed.

For the CAIR final methodology, EPA also considered both the allowance allocations and emissions for companies' sources both in the CAIR region and outside the CAIR region. EPA believes that this is appropriate because, under the

CAIR final methodology, if a company's sources outside the CAIR region have more title IV allowances than needed to cover their emissions under the Acid Rain Program, the company could transfer, at little or no net cost, excess allowances to the company's sources in the CAIR region for use to cover emissions under the CAIR trading program. Under the three alternative methodologies, which would require creating new CAIR SO2 allowances independent of the existing title IV allocations, CAIR sources could not use title IV for compliance with the CAIR SO2 allowance holding requirements.

Further, in the analysis of the CAIR final methodology, EPA considered the allocation of title IV allowances to CAIR region units that are not currently in the Acid Rain Program but that could opt into the Acid Rain Program and receive title IV allowances (see 42 U.S.C. 7651i and 18 CFR part 74). This analysis assumed that companies owning non-Acid Rain units affected by CAIR would opt into the Acid Rain Program because they would receive title IV allowances to cover a portion of the unit's emissions under CAIR. EPA believes this assumption is reasonable because there is very little cost associated with opting into the Acid Rain

Program.<sup>5</sup> In contrast, the analysis of the three alternative methodologies did not consider Acid Rain Program opt-in allowances because these approaches do not use title IV allowances for CAIR compliance.

EPA's analyses, of which a detailed description is available in the docket, encompassed 112 (control case) to 114(base case) parent/holding companies with sources covered by the CAIR. These 112 to 114 companies represent about two-thirds of the total number of CAIR plants, over 95 percent of total annual allocations for all methodologies during 2015, and about 97 percent of the total projected emissions in the CAIR region in 2015.6

While allocations vary from company to company under the four methodologies, overall, the distributions of allowances that companies received relative to their projected emissions for both the base case and control case are very similar. In other words, no methodology stands out as providing a more reasonable method of allocation across all companies when examining allowance needs under either

<sup>&</sup>lt;sup>5</sup> The greatest cost associating with opting in to the Title IV program is the cost of monitoring. Since these sources are already required to monitor using the same monitoring methodologies that would be required if they were to opt in, their costs for opting in are significantly reduced.
<sup>6</sup> According to EPA inventory data, there are a total of 921 CAIR affected plants. EPA did not have complete owner, parent company information for all of these plants.

the base case or control case. Figures 1 and 2, below, show the distribution of values for each methodology under the two cases, and support this conclusion. EPA repeated these analyses for 2010, which show similar results. Separate analyses of owner/operating company allowances compared to emissions in 2010 and 2015, show similar results, as well.

See TSD Memo, "Technical Support Document for Clean Air Interstate Rule Response to Petition for Reconsideration."

Figure 1. Note: A small number of the companies in the analysis are not shown because they are outliers -- receiving allocations greater than four times their projected 2015 emissions – and if included, render the figure extremely difficult to understand. See table in the TSD for details.

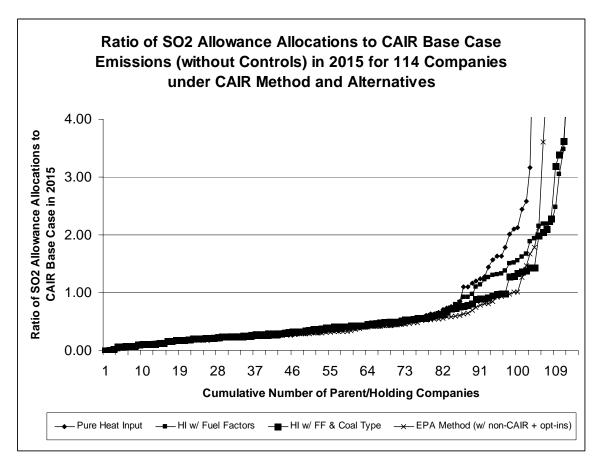
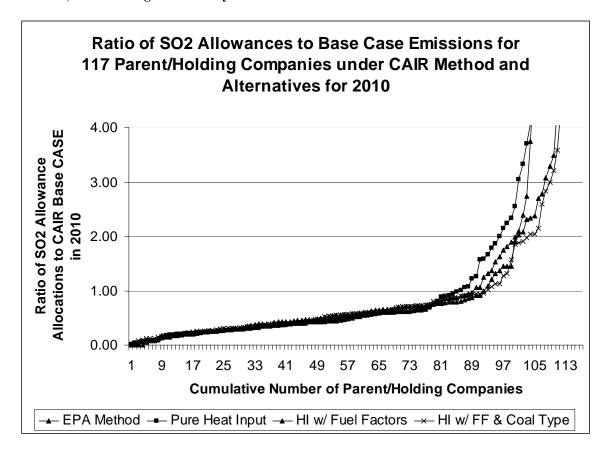


Figure 2. . Note: A small number of the companies in the analysis are not shown because they are outliers -- receiving allocations greater than four times their projected 2015 emissions – and if included, render the figure extremely difficult to understand. See table in the TSD for details.



EPA also notes that, while the Petitioner states that the CAIR final allocation methodology is "inequitable" because lower emitting units would buy allowances from higher emitting units that install emission controls, it is unclear why such a result would actually be inequitable. On the contrary, the owner of each of the units involved would be choosing to adopt the most economic compliance strategy in light of the unit's emission control costs and the market value of allowances. The ability of the owners to make such choices reflects the flexibility provided by a cap and trade program.

The EPA requests comment on its analyses of the four allocation methodologies and on the above discussion of the Petitioner's concerns.

# B. Fuel Adjustment Factors Used to Set State NOx Budgets

Several petitioners argue the Agency did not provide adequate notice regarding the use of specific fuel adjustment factors to establish NOx budgets for States in the CAIR region. As explained below, EPA believes that it provided adequate notice both that the fuel adjustment factors might be used and of the calculation procedures that it would use to determine the specific factors.

Nevertheless, given the significant public interest in this issue, EPA has decided to grant reconsideration of, and to

take comment on, EPA's use of fuel adjustment factors (i.e., 1.0 for coal, 0.4 for gas, and 0.6 for fuel oil) in setting State NOx budgets. Today's action also presents additional analysis that EPA conducted to further explain the impact of these factors on State annual NOx budgets. This analysis demonstrates that the factors selected are reasonable and decrease the disparity between most States' actual electric generation unit (EGU) emissions and their State NOx budgets. For that reason, EPA is not proposing any changes to the final CAIR at this time.

The CAIR establishes regional emission budgets for annual NOx, and seasonal NOx emissions. These regional budgets are then further divided into State budgets, with a share of each total regional budget allocated to each State in the corresponding CAIR region. States choosing to participate in the trading programs will be able to allocate, to sources in their State, the number of allowances in their budgets. Petitioners challenge the methodology EPA used to establish these State budgets for annual and seasonal NOx.

# Background

For States choosing to participate in the trading program, these budgets determine the number of allowances that could be allocated to sources in that State. In a cap

and trade system, however, the methodology used to allocate allowances in any given year would not affect where control technologies are installed. Rather, the determinant would be the cost of adding controls compared to the cost of buying, or the profit from selling, allowances. Controls are expected to be installed where it is relatively less expensive, without regard to which units received the initial allocation of allowances. Further, the total cost to industry of controlling emissions and the total amount of reductions achieved would not be affected by the allocation methodology in a given year (for a permanent system). allocation method, however, could have financial impacts on individual units and companies. A unit that receives more allocations than it has emissions would get a benefit at the expense of a unit that does not receive enough allocations to cover its emissions. While States choosing to participate in the cap and trade program can determine how to allocate allowances among their units, companies in States whose budgets exceed projected EGU emissions would likely receive a financial benefit while companies in States

<sup>&</sup>lt;sup>7</sup> A permanent allocation approach, such as the CAIR allocation methodology in the model trading rules, should not affect where controls are installed. This is true regardless of the type of approach used to permanently allocate allowances (e.g., heat input, adjusted heat input, or output). The use of an updating allocation system, on the other hand, could impact future generation behavior.

whose budgets are lower than their EGU emissions would likely incur additional costs. In the absence of other considerations, EPA believes that it is in the public interest to reduce the disparity between the number of allowances in a State budget and total projected State EGU emissions.

# Notice of Fuel Factor Use in CAIR Promulgation

In the CAIR notice of proposed rulemaking (NPR), EPA proposed to use the simple heat input method. (69 FR 4566)

This approach used the un-adjusted heat input to set budgets based on heat input data from the years 1999 through 2002.

EPA proposed to give each State a pro rata share of the regional NOx budget based on the ratio of its average annual heat input to the regional total average annual heat input

In the Supplemental Notice of Proposed Rulemaking (SNPR), EPA proposed to supplement and update the data used to calculate the State annual NOx budgets (69 FR 32684).

EPA also described an alternative method that could be used to calculate the budgets -- the adjusted heat input (fuel factor) method. This approach, EPA explained, would "... reflect the inherently higher emissions rate of coal-fired plants, and consequently the greater burden on coal plants to control emissions." (See 69 FR 32689.) The SNPR further explains "in contrast to allocations based on historic

emissions, the factors would also not penalize coal-fired plants that have already installed pollution controls" (69 FR 32689). In the SNPR, EPA also described the method that it would use to derive specific fuel factors if this adjusted heat input method was selected. EPA explained, "States' shares would be determined by the amount of the State heat input, as adjusted, in proportion to the total regional heat input. The factors could be based on average historic emissions rates (in lbs/mmBtu) by fuel type (coal, gas, and oil) for the years 1999-2002" (69 FR 32689). The SNPR did not identify the specific numeric factors that would be used. EPA received and responded to numerous comments addressing this alternative fuel factor approach. (See "Corrected Response to Significant Public Comments on the Proposed Clean Air Interstate Rule," pp. 520-576.)

EPA established State NOx budgets for the final CAIR using the adjusted heat input method. The specific fuel factors used to adjust heat input data were 1.0 for coal, 0.4 for gas and 0.6 for oil. These factors are based on the average historic NOx emissions rate for each fuel. They reflect for each fuel, the 1999-2002 average emissions by State summed for the CAIR region, divided by average heat input by fuel by State, summed for the CAIR region (70 FR 25230-31).

# EPA Analyses of Potential Impacts

EPA conducted two analyses to evaluate the potential impact of using the adjusted heat input method versus the simple heat input method on State annual NOx budgets: one on a regionwide scale and the second on a State-by-State level.

The regionwide analysis of the potential impacts compared regionwide budgets using both approaches (i.e., simple heat input and fuel factor) to the regionwide projected emissions of units fired with that fuel. 8 Regional budgets and emissions, by fuel type, are summarized in Table 1.

| Table 1: Regionwide Comparison of CAIR Allowance Distributions |                           |                |       |                          |                 |       |
|--|---------------------------|----------------|-------|--------------------------|-----------------|-------|
| and Emissions by Fuel Type (thousand                           |                           |                |       |                          |                 |       |
| tons)  |                           |                |       |                          |                 |       |
|  | Projected 2009* Emissions |                |       | Projected 2015 Emissions |                 |       |
|  | and Allowances            |                |       | and Allowances           |                 |       |
|  | Coal                      | Other Fossil** | Total | Coal                     | Other<br>Fossil | Total |
| Base Case  |                           |                |       |                          |                 |       |
| Emissions  | 2,635                     | 97             | 2,732 | 2,650                    | 96              | 2,746 |
| CAIR   |                           |                |       |                          |                 |       |
| Emissions  | 1,404                     | 99             | 1,503 | 1,151                    | 89              | 1,254 |
| Simple Heat  |                           |                |       |                          |                 |       |
| Input  |                           |                |       |                          |                 |       |
| Allowances   | 1,197                     | 308            | 1,505 | 998                      | 256             | 1,254 |
| Fuel Factor  |                           |                |       |                          |                 |       |
| Adjusted   |                           |                |       |                          |                 |       |
| Allowances   | 1,349                     | 156            | 1,505 | 1,124                    | 130             | 1,254 |
| *Numeric value is based on 2010 projections.                   |                           |                |       |                          |                 |       |

\*\*Numeric value includes wood

and refuse in three States.

<sup>&</sup>lt;sup>8</sup> It should be noted that simple heat input or adjusted heat input are used to set State budgets and do not imply that States would allocate allowances to units in that manner. In the proposal, EPA gives States flexibility in the

Assuming allowances are often passed through to generation units in the same way that they are apportioned to the States, Table 1 illustrates that under either approach natural gas-fired and other non-coal-fired generation receives more allowances than their projected emissions in both 2009 and 2015 and therefore States with more units of this type receive a greater share of the budget. However, using the fuel factor approach, the disparity between the number of allowances provided and the emissions is less than under the simple heat input method. Table 1 also demonstrates that the majority of emission reductions are made by coal-fired sources. States with more of these types of units receive a greater share of the regional budget under the fuel factor approach (however, the portion of the budget derived from the heat input from these units is still generally smaller than their projected emissions). Therefore, the fuel factor approach generally provides additional allowances to States with large amounts of coal-fired units that are making the investments in emission control measures and technologies. Conversely the simple heat input approach provides more allowances to States with larger amounts of gas-fired units that are not making reductions. Note that under either approach the

distribution of allowances.

portion of the State budgets derived from the heat input from the gas-fired units generally exceeds both the historical and the future projected emissions from these units. This finding led EPA to believe that the fuel factor approach better reduced the disparity between projected emissions and State budgets.

EPA conducted a second analysis that examined the potential impacts of the two approaches for developing Statewide budgets (i.e., simple heat input and fuel factor) on a State-by-State basis. This analysis, summarized in Tables 2 and 3 below, shows that States receiving fewer allowances using a fuel factor approach, generally still receive Statewide budgets that are greater than their projected emissions in 2009 and 2015. This results because a substantial portion of their generation portfolio consists of gas-fired sources with generally low NOx emission levels.

|       | Table 2: Compar                   |          | fc                                     | or CAIR Sta | ates Not D                           | te Budgets<br>ominated I |       |  |
|-------|-----------------------------------|----------|--|-------------|--------------------------------------|--------------------------|-------|--|
| Ctata |                                   | Projecte | ition (thou<br>d 2009* En<br>nd Budget | nissions    | Projected 2015 Emissions and Budgets |                          |       |  |
| State |                                   | Coal     | Other<br>Fossil                        | Total       | Coal                                 | Other<br>Fossil          | Total |  |
| DC**  | Base Case<br>Emissions            | 0        | 0                                      | 0           | 0                                    | <1                       | <1    |  |
|       | CAIR<br>Emissions                 | 0        | <1                                     | <1          | 0                                    | <1                       | <1    |  |
|       | Simple Heat<br>Input Budget       | 0        | <1                                     | <1          | 0                                    | <1                       | <1    |  |
|       | Fuel Factor<br>Adjusted<br>Budget | 0        | <1                                     | <1          | 0                                    | <1                       | <1    |  |

|    | Base Case                         |     |     |     |     |    |     |
|----|-----------------------------------|-----|-----|-----|-----|----|-----|
| LA | Emissions                         | 45  | 5   | 49  | 45  | 5  | 50  |
|    | CAIR                              |     |     |     |     |    |     |
|    | Emissions                         | 30  | 4   | 35  | 27  | 5  | 32  |
|    | Simple Heat<br>Input Budget       | 19  | 23  | 42  | 16  | 26 | 42  |
|    | Fuel Factor<br>Adjusted<br>Budget | 21  | 14  | 36  | 18  | 12 | 30  |
| NY | Base Case<br>Emissions            | 38  | 7   | 45  | 38  | 6  | 44  |
|    | CAIR<br>Emissions                 | 29  | 7   | 36  | 15  | 6  | 21  |
|    | Simple Heat<br>Input Budget       | 19  | 42  | 61  | 16  | 35 | 51  |
|    | Fuel Factor<br>Adjusted<br>Budget | 21  | 25  | 46  | 17  | 21 | 38  |
| тх | Base Case<br>Emissions            | 141 | 45  | 186 | 141 | 39 | 179 |
|    | CAIR<br>Emissions                 | 122 | 44  | 166 | 122 | 35 | 157 |
|    | Simple Heat<br>Input Budget       | 114 | 118 | 231 | 95  | 98 | 192 |
|    | Fuel Factor<br>Adjusted<br>Budget | 128 | 53  | 181 | 106 | 44 | 151 |
| MS | Base Case<br>Emissions            | 36  | 1   | 37  | 36  | 2  | 37  |
|    | CAIR<br>Emissions                 | 30  | 1   | 31  | 6   | 2  | 8   |
|    | Simple Heat<br>Input Budget       | 11  | 10  | 21  | 9   | 8  | 18  |
|    | Fuel Factor<br>Adjusted<br>Budget | 13  | 5   | 18  | 10  | 4  | 15  |
| FL | Base Case<br>Emissions            | 132 | 19  | 151 | 132 | 18 | 151 |
|    | CAIR<br>Emissions                 | 51  | 17  | 69  | 44  | 18 | 61  |
|    | Simple Heat<br>Input Budget       | 58  | 58  | 116 | 48  | 48 | 97  |
|    | Fuel Factor<br>Adjusted<br>Budget | 65  | 34  | 99  | 54  | 28 | 83  |

\*Numeric value is based on 2010 projections.

\*\* For DC: Projected Base Case emissions are 35 tons in 2015. CAIR Emissions are projected to be 35 tons in both 2009 and 2015. Simple Heat Input budgets are 213 and 178 tons in 2009 and 2015, respectively. Fuel Factor budgets are 144 and 120 tons in 2009 and 2015, respectively.

Table 2 lists those States in the CAIR region that have significant amounts (i.e., 40 percent or greater) of generation sources that combust fossil fuels other than coal. As illustrated by Table 2, DC, FL, LA, MS, NY, and TX, while receiving fewer allowances under a fuel factor approach, are provided with reasonable Statewide budgets that are comparable to their projected emissions in 2009 and 2015. If the States were to directly pass through allowances to their gas-fired units, these units would still have excess allowances. Furthermore in most cases, these States still receive a larger budget than they need to cover their projected emissions.

| Table 3: | Compari      | son of | Projected :             | NO <sub>x</sub> Emission   | ns and Stat       | e Budge                              | ts for C | AIR States              | (thousa                    | nd tons)          |  |
|----------|--------------|--------|-------------------------|----------------------------|-------------------|--------------------------------------|----------|-------------------------|----------------------------|-------------------|--|
|          | Pro          | jected | 2009* Emis              | sions and Bu               | ıdgets            | Projected 2015 Emissions and Budgets |          |                         |                            |                   |  |
|          | Emissions    |        | Budget                  |                            |                   | Emissions                            |          | Budget                  |                            |                   |  |
| State    | Base<br>Case | CAIR   | Simple<br>Heat<br>Input | Fuel<br>Factor<br>Adjusted | Percent<br>Change | Base<br>Case                         | CAIR     | Simple<br>Heat<br>Input | Fuel<br>Factor<br>Adjusted | Percent<br>Change |  |
| DC**     | 0            | <1     | <1                      | <1                         | -32%              | <1                                   | <1       | <1                      | <1                         | -33%              |  |
| LA       | 49           | 35     | 50                      | 36                         | -29%              | 50                                   | 32       | 42                      | 30                         | -29%              |  |
| NY       | 45           | 36     | 61                      | 46                         | -25%              | 44                                   | 21       | 51                      | 38                         | -25%              |  |
| тx       | 186          | 166    | 231                     | 181                        | -22%              | 179                                  | 157      | 192                     | 151                        | -22%              |  |
| MS       | 37           | 31     | 21                      | 18                         | -16%              | 37                                   | 8        | 18                      | 15                         | -16%              |  |
| FL       | 151          | 69     | 116                     | 99                         | -14%              | 151                                  | 61       | 97                      | 83                         | -14%              |  |
| MI       | 117          | 88     | 64                      | 65                         | 3%                | 120                                  | 90       | 53                      | 54                         | 3%                |  |
| MD       | 57           | 13     | 27                      | 28                         | 4%                | 57                                   | 12       | 22                      | 23                         | 4%                |  |
| VA       | 68           | 43     | 35                      | 36                         | 5%                | 60                                   | 39       | 29                      | 30                         | 5%                |  |
| AL       | 132          | 65     | 64                      | 69                         | 8%                | 134                                  | 49       | 53                      | 58                         | 8%                |  |
| GA       | 143          | 106    | 61                      | 66                         | 9%                | 141                                  | 67       | 51                      | 55                         | 9%                |  |
| IL       | 146          | 66     | 70                      | 76                         | 9%                | 159                                  | 65       | 58                      | 64                         | 9%                |  |

| 1     | 1    |      |      | 1    |     | ĺ    | 1    |      | Ì    | 1   |
|-------|------|------|------|------|-----|------|------|------|------|-----|
| WI    | 71   | 47   | 37   | 41   | 9%  | 69   | 34   | 31   | 34   | 9%  |
| PA    | 198  | 86   | 90   | 99   | 10% | 193  | 72   | 75   | 83   | 10% |
| sc    | 49   | 38   | 30   | 33   | 10% | 50   | 36   | 25   | 27   | 10% |
| МО    | 116  | 64   | 54   | 60   | 10% | 118  | 66   | 45   | 50   | 10% |
| MN    | 72   | 36   | 28   | 31   | 11% | 74   | 37   | 24   | 26   | 11% |
| NC    | 60   | 59   | 56   | 62   | 11% | 61   | 49   | 47   | 52   | 11% |
| IN    | 234  | 121  | 98   | 109  | 11% | 233  | 79   | 81   | 91   | 11% |
| ОН    | 264  | 91   | 97   | 109  | 12% | 274  | 90   | 81   | 91   | 12% |
| TN    | 106  | 37   | 46   | 51   | 12% | 106  | 27   | 38   | 42   | 12% |
| KY    | 176  | 99   | 74   | 83   | 12% | 176  | 74   | 62   | 69   | 12% |
| IA    | 76   | 45   | 29   | 33   | 12% | 81   | 47   | 24   | 27   | 12% |
| wv    | 179  | 62   | 66   | 74   | 13% | 176  | 40   | 55   | 62   | 13% |
| Total | 2732 | 1503 | 1505 | 1505 | 0%  | 2746 | 1254 | 1254 | 1254 | 0%  |

\*Numeric value is based on 2010 projections.

Table 3 shows that relative to the simple heat input method the fuel factor method reduces the disparity between projected State emissions and State budgets, because the fuel factor approach allocates State budgets that are generally closer to projected State emissions. As explained above, the States that receive smaller budgets under the fuel factor method are still generally receiving budgets that exceed their projected emissions. States that receive larger budgets under the fuel factor method are generally States with a large amount of coal-fired generation that are installing post combustion controls as a result of CAIR.

# Analysis of Potential Delaware and New Jersey Impacts

The analyses described above were conducted for the States in the CAIR PM2.5 region only. EPA has proposed to add Delaware and New Jersey to the CAIR region for PM2.5

<sup>\*\*</sup>For DC: Projected \*\*Base Case emissions are 35 tons in 2015. CAIR Emissions are projected to be 35 tons in both 2009 and 2015. Simple Heat Input budgets are 213 and 178 tons in 2009 and 2015, respectively. Fuel Factor budgets are 144 and 120 tons in 2009 and 2015, respectively.

("Inclusion of Delaware and New Jersey in the Clean Air Interstate Rule", EPA, May 10, 2005), but has not yet taken final action on this proposal. EPA proposed a separate 2-State "regional" budget for Delaware and New Jersey of just over 14,000 tons. EPA's analysis, presented in Table 4, shows that apportioning this budget between the two States based on a fuel factor method instead of a simple heat input method, is reasonable. ("Inclusion of Delaware and New Jersey in the Clean Air Interstate Rule", EPA, May 10, 2005)

|       | Projecte               | d 2009* Emiss     | ions and All                      | owance Allo                          | cation            | Projected 2015 Emissions and Allowance Allocation |                   |                                   |                                      |                   |
|-------|------------------------|-------------------|-----------------------------------|--------------------------------------|-------------------|---|-------------------|-----------------------------------|--------------------------------------|-------------------|
| State | Base Case<br>Emissions | CAIR<br>Emissions | Simple<br>Heat<br>Input<br>Budget | Fuel<br>Factor<br>Adjusted<br>Budget | Percent<br>Change | Base Case<br>Emissions                            | CAIR<br>Emissions | Simple<br>Heat<br>Input<br>Budget | Fuel<br>Factor<br>Adjusted<br>Budget | Percent<br>Change |
| ŊJ    | 16.8                   | 12.0              | 13.4                              | 12.7                                 | -5.6%             | 17.9  | 12.8              | 11.2                              | 10.6                                 | -5.69             |
| DE    | 9.4                    | 8.5               | 3.4                               | 4.2                                  | 22.1%             | 10.7  | 9.5               | 2.8                               | 3.5                                  | 22.29             |

# Other Considerations

EPA notes that the analyses above were conducted for State annual NOx budgets established in the CAIR. CAIR also establishes seasonal NOx budgets using the fuel factor approach. EPA did not conduct a similar analysis of the seasonal NOx budgets. EPA modeling indicates that the ozone season program is likely to function as a backstop to the

annual NOx program, and that the annual NOx program is likely to impose the binding constraint on NOx emissions.

Finally, to ensure that our estimates appropriately reflect the distribution of emissions in the case of higher electricity demand and increased gas and oil prices, EPA conducted a sensitivity run using EIA's forecast of higher electricity demand and gas and oil prices. This run produced very similar emissions results to the original NOx analysis, showing that EPA's original analysis is robust enough to support the fuel adjusted heat input approach finalized in CAIR. (See the "CAIR Statewide NOx Budget Calculations Technical Support Document, EPA 2005, for additional discussion of the analysis.)

# C. PM2.5 Modeling for Minnesota

One petitioner asserts that EPA's modeling to determine whether emissions from Minnesota significantly contribute to downwind nonattainment of the PM2.5 NAAQS failed to take into account certain emissions reductions required by State programs. The petitioner asserts that if these reductions had been properly included in the modeling done for CAIR, the modeling might show that the State of Minnesota does not significantly contribute to downwind nonattainment of the PM2.5 NAAQS. The petitioner also asked EPA to stay implementation of the CAIR in Minnesota. The Agency is not

taking action on the request for a stay at this time.

The Agency agrees that EPA's modeling of the contribution of emissions from Minnesota to downwind PM2.5 nonattainment for the final CAIR did not fully account for the effects on future year emissions of certain State control programs. In order to ensure that all parties have ample opportunity to comment on all aspects of this issue, EPA is reconsidering the air quality modeling inputs for Minnesota.

Using the corrected inputs described below, EPA recently remodeled the PM2.5 contributions from emissions in Minnesota. In this analysis, EPA used the same PM2.5 modeling platform that was used for the final CAIR modeling. This modeling platform is described in the CAIR Air Quality Modeling Technical Support Document ("Technical Support Document for the Final Clean Air Interstate Rule, Air Quality Modeling," March 2005, OAR-2003-0053-2123). The EPA is not taking comment on the modeling platform itself, only on the corrected 2010 emissions inputs for Minnesota, as described below.

The result of the revised 2010 Minnesota PM2.5 contribution modeling is that Minnesota contributes a maximum of 0.20  $\mu g/m^3$  to PM2.5 nonattainment in Chicago, IL. This result confirms the findings from the CAIR PM2.5

contribution modeling that emissions in Minnesota make a significant contribution to PM2.5 nonattainment in Chicago, IL. The 2010 emissions inputs used in the revised Minnesota modeling and the revised contributions to each downwind nonattainment receptor county can be found in the CAIR docket.

The following discussion provides background on the corrected emissions inputs for Minnesota and on air quality analyses that the Agency conducted prior to finalizing CAIR.

The emissions for the electric power sector used in EPA's contribution modeling for the final CAIR were derived from the Integrated Planning Model (IPM). The IPM is designed to forecast the projected impact of environmental polices on the electric power sector. The Agency updated its IPM modeling for the final CAIR. As part of a routine model update to the IPM and in response to comments from various parties, EPA updated the inventory of EGUs, made revisions to several model assumptions, and added various State rules, regulations, and New Source Review settlements to best reflect available data and information.

In that IPM update for the final CAIR, the Agency included emission reduction actions that are required by Minnesota for certain units, based on the data available. However, as discussed in the RTC for the final CAIR

("Corrected Response to Significant Public Comments on the Proposed Clean Air Interstate Rule," March 2005, corrected April 2005, OAR-2003-0053-2172) as well as in a memorandum to the CAIR docket entitled "Emissions in Minnesota: Additional Analysis" (OAR-2003-0053-2091)("Minnesota memorandum"), the Agency discovered that there may be some discrepancies between how the Agency represented the Minnesota emissions reductions in the final CAIR IPM update and how the reductions would be implemented. The Agency revised its IPM model to better reflect the emissions reductions from those Minnesota units and conducted revised emissions modeling using the IPM (in the memorandum mentioned above, the revised emissions modeling is described as a sensitivity analysis.) The revised emissions modeling (sensitivity analysis) resulted in somewhat lower NOx and SO2 emission projections for Minnesota in the base case, compared to the emissions modeling done for the final CAIR. The revised emissions modeling was discussed in the RTC for the final CAIR and in the Minnesota memorandum.

Specifically, that revised IPM modeling projects statewide utility NOx emissions roughly 16,500 tons lower and SO2 emissions about 5,800 tons lower than the emissions modeling used in the final CAIR. These revised NOx and SO2 emission projections result in lower total NOx and SO2

emissions of 4.6 percent and 4.3 percent, respectively, than the emission projections used in the final CAIR modeling. In order to account for these revised emission projections, the Agency performed two analyses to estimate whether air quality modeling based on the lower emission projections would show that Minnesota's downwind contribution was below the PM2.5 significance threshold of 0.2 µg/m³. The EPA's modeling of Minnesota for the final CAIR showed that Minnesota's maximum downwind contribution is 0.21 µg/m³ to Cook County, Illinois. The Agency's analyses of the effects of the lower emission projections on Minnesota's maximum contribution, which were presented in the RTC for the final CAIR and the Minnesota Memorandum, are summarized below:

- Analysis 1: We reduced the maximum PM2.5 contribution by the larger of the percent reduction in NOx and SO2 emissions (i.e., the 4.6 percent reduction in NOx). The maximum PM2.5 contribution after making this adjustment is  $0.2~\mu g/m^3$ .
- Analysis 2: We reduced the sulfate and nitrate portions
   of the maximum PM2.5 contribution by the corresponding
   reductions in SO2 and NOx emissions. Specifically, the
   sulfate portion (including sulfate, ammonium, and

particle-bound water) was reduced by the 4.3 percent reduction in SO2 emissions and the nitrate portion was reduced by the 4.6 percent reduction in NOx emissions. We then recalculated the maximum contribution using these lower components. The result is that the adjusted maximum PM2.5 contribution is  $0.2~\mu g/m^3$ .

Thus, the analyses presented in the RTC and the Minnesota memorandum indicate that Minnesota makes a significant contribution to PM2.5 nonattainment, even after considering the lower emissions levels in the revised emissions modeling.

Although the Agency's analyses of downwind impacts from Minnesota which were based on the revised emissions modeling (and presented in the RTC and the Minnesota memorandum) indicate that the State makes a significant contribution to downwind PM2.5 nonattainment, the Agency acknowledges that

<sup>&</sup>lt;sup>9</sup> Although the petition acknowledges that the Agency revised its IPM emissions analysis to reflect emission reductions at certain Minnesota units, it states incorrectly that "EPA subsequently learned that emission levels in the IPM sensitivity analysis were overstated by an additional 16,500 tons of annual NOx emissions and 5,800 tons of annual SO2 emissions" (petition, p. 7). As discussed above, the emission projections in EPA's revised IPM modeling (the sensitivity analysis) were in fact lower by 16,500 tons of annual NOx emissions and 5,800 tons of SO2 emissions than the emission projections in EPA's modeling for the final CAIR. For the same reason, the petition is incorrect in

it did not at that time conduct air quality modeling based on the revised emissions modeling. However, as discussed above, the Agency has now remodeled the PM2.5 contribution from emissions in Minnesota and the results of that revised modeling confirm that emissions in Minnesota make a significant contribution to PM2.5 nonattainment in Chicago, IL. This revised PM2.5 contribution modeling used the same modeling platform as EPA used for the final CAIR modeling coupled with the revised emissions inputs for Minnesota discussed above. The EPA is taking comment only on the revised inputs for Minnesota discussed above.

# D. Inclusion of Florida in the CAIR Region for Ozone

Florida petitioners (the Florida Association of Electric Utilities and FPL Group) maintain that neither the proposed rule nor the supplemental proposal or notice of additional data availability gave adequate notice that Florida might be included within the CAIR region as a significant contributor for ozone. They further maintain that EPA's ultimate determination to include Florida within the ozone CAIR region was based on modeling inputs not readily available for comment. The petitioners state that they therefore lacked adequate opportunity to comment on this issue.

stating (p. 7) that EPA failed to consider these emission

The EPA does not fully accept the Florida petitioners' characterization. Clearly, for example, EPA gave notice that it would utilize a different modeling platform for the final rule, with the necessary implication that this could change the makeup of the CAIR ozone (and PM 2.5) regions (69 FR 47828; August 6, 2004). The EPA also provided access to the data inputs for the modeling runs, including emissions data and the information necessary to process that emissions data into model-ready files. Nonetheless, considering all the factors here (notably the absence of Florida from the CAIR region for ozone in the NPR and SNPR), EPA has decided to provide an opportunity for additional public comment on the inclusion of Florida within the CAIR region for ozone.

# IV. Statutory and Executive Order Reviews

## A. Executive Order 12866: Regulatory Planning and Review

Under Executive Order 12866 (58 FR 51735, October 4, 1993), the Agency must determine whether the regulatory action is "significant" and, therefore, subject to Office of Management and Budget (OMB) review and the requirements of the Executive Order. The Order defines "significant regulatory action" as one that is likely to result in a rule that may:

reductions in its analysis.

- (1) have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or Tribal governments or communities;
- (2) create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;
- (3) materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or
- (4) raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order.

Pursuant to the terms of Executive Order 12866, OMB has determined that this is not a significant regulatory action. This notice takes comment on several aspects of the CAIR, but does not propose any modifications.

#### B. Paperwork Reduction Act

This action does not propose information collection request requirements under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501 et seq. Therefore, an information collection request document is not required.

Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain,

or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number.

The OMB control numbers for EPA's regulations in 40 CFR are listed in 40 CFR part 9.

## C. Regulatory Flexibility Act

The Regulatory Flexibility Act generally requires an Agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedures Act or any other statute unless the Agency certifies the rule will not have a significant economic impact on a substantial number of small

entities. Small entities include small businesses, small organizations, and small governmental jurisdictions.

For purposes of assessing the impacts of today's proposed rule on small entities, small entity is defined as:

(1) a small business that is a small industrial entity as defined in the U.S. Small Business Administration (SBA) size standards. (See 13 CFR part 121.); (2) a governmental jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.

After considering the economic impacts of today's proposed rule on small entities, I certify that this action will not have a significant economic impact on a substantial number of small entities. This notice does not impose any requirements on small entities. We are only announcing our decision to reconsider and request comment on specific issues in the CAIR. We continue to be interested in the potential impacts of the rule on small entities and welcome comments on issues related to such impacts.

#### D. Unfunded Mandates Reform Act

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Public Law 104-4, establishes requirements for

Federal agencies to assess the effects of their regulatory actions on State, local, and Tribal governments and the private sector. Under section 202 of the UMRA, EPA generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules with "Federal mandates" that may result in expenditures by State, local, and Tribal governments, in the aggregate, or by the private sector, of \$100 million or more in any 1 year. Before promulgating an EPA rule for which a written statement is needed, UMRA section 205 generally requires EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most costeffective, or least-burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows EPA to adopt an alternative other than the least-costly, most cost-effective, or leastburdensome alternative if the Administrator publishes with the final rule an explanation why that alternative was not adopted. Before EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, including tribal governments, it must have developed, under section 203 of the UMRA, a small government agency plan. The plan must provide for notifying potentially affected

small governments, enabling officials of affected small governments to have meaningful and timely input in the development of EPA's regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements.

The EPA has determined that today's notice of reconsideration does not contain a Federal mandate that may result in expenditures of \$100 million or more for State, local, and Tribal governments, in the aggregate, or the private sector in any 1 year. Today's notice of reconsideration of the CAIR does not add new requirements that would increase the cost of the CAIR. Thus, today's notice of reconsideration is not subject to the requirements of sections 202 and 205 of the UMRA. In addition, EPA has determined that today's notice of reconsideration does not significantly or uniquely affect small governments because it contains no requirements that apply to such governments or impose obligations upon them. Therefore, today's notice of reconsideration is not subject to section 203 of the UMRA.

#### E. Executive Order 13132: Federalism

Executive Order 13132, entitled "Federalism" (64 FR 43255, August 10, 1999), requires EPA to develop an

accountable process to ensure "meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications."

"Policies that have federalism implications" is defined in the Executive Order to include regulations that have "substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government."

This action does not have federalism implications. It would not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. The CAA establishes the relationship between the Federal Government and the States, and this action would not impact that relationship. Thus, Executive Order 13132 does not apply to this action.

# F. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments

Executive Order 13175, entitled "Consultation and Coordination with Indian Tribal Governments" (65 FR 67249, November 9, 2000), requires EPA to develop an accountable process to ensure "meaningful and timely input by Tribal

officials in the development of regulatory policies that have Tribal implications."

For the same reasons stated in the final CAIR, today's notice does not have Tribal implications as defined by Executive Order 13175. It does not have a substantial direct effect on one or more Indian Tribes, since no Tribe has implemented a federally-enforceable air quality management program under the CAA at this time. Furthermore, this action does not affect the relationship or distribution of power and responsibilities between the Federal government and Indian Tribes. The CAA and the Tribal Air Rule establish the relationship of the Federal government and Tribes in developing plans to attain the NAAQS, and today's notice does nothing to modify that relationship. Because this notice does not have Tribal implications, Executive Order 13175 does not apply.

If one assumes a Tribe is implementing a Tribal implementation plan, the CAIR could have implications for that Tribe, but it would not impose substantial direct costs upon the Tribe, nor would it preempt Tribal Law.

Although Executive Order 13175 does not apply to the CAIR or this notice of reconsideration of the CAIR, EPA consulted with Tribal officials in developing the CAIR.

#### G. Executive Order 13045: Protection of Children from

# Environmental Health and Safety Risks

Executive Order 13045: "Protection of Children From Environmental Health and Safety Risks" (62 FR 19885, April 23, 1997) applies to any rule that (1) is determined to be "economically significant" as defined under Executive Order 12866, and (2) concerns an environmental health or safety risk that EPA has reason to believe may have disproportionate effect on children. If the regulatory action meets both criteria, the Agency must evaluate the environmental health or safety effects of the planned rule on children, and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency.

This notice is not subject to Executive Order 13045 because it does not involve decisions on environmental health risks or safety risks that may disproportionately affect children. The EPA believes that the emissions reductions from the CAIR will further improve air quality and children's health.

# H. Executive Order 13211: Actions That Significantly Affect Energy Supply, Distribution, or Use

Executive Order 13211 (66 FR 28355, May 22, 2001) provides that agencies shall prepare and submit to the Administrator of the Office of Regulatory Affairs, OMB, a

Statement of Energy Effects for certain actions identified as "significant energy actions." Section 4(b) of Executive Order 13211 defines "significant energy actions" as "any action by an agency (normally published in the Federal Register) that promulgates or is expected to lead to the promulgation of a final rule or regulation, including notices of inquiry, advance notices of final rulemaking, and notices of final rulemaking (1) (i) a significant regulatory action under Executive Order 12866 or any successor order, and (ii) likely to have a significant adverse effect on the supply, distribution, or use of energy; or (2) designated by the Administrator of the Office of Information and Regulatory Affairs as a "significant energy action." The final CAIR is a significant regulatory action under Executive Order 12866, and EPA concluded that the final CAIR rule may have a significant adverse effect on the supply, distribution, or use of energy. The impacts are detailed in the final CAIR (70 FR 25315). Today's notice of reconsideration of the CAIR is not a significant action under Executive Order 12866 and does not change EPA's previous conclusions.

# I. National Technology Transfer Advancement Act

Section 12(d) of the National Technology Transfer

Advancement Act of 1995, Public Law No. 104-113, section

12(d) (15 U.S.C. 272 note) directs EPA to use voluntary consensus standards in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures, and business practices) that are developed or adopted by voluntary consensus standards bodies. The National Technology Transfer Advancement Act of 1995 directs EPA to provide Congress, through OMB, explanations when the Agency decides not to use available and applicable voluntary consensus standards.

Today's notice does not involve technical standards.

Therefore, the National Technology Transfer and Advancement

Act of 1995 does not apply.

# J. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations

Executive Order 12898, "Federal Actions to Address

Environmental Justice in Minority Populations and Low-Income

Populations," requires Federal agencies to consider the impact of programs, policies, and activities on minority populations and low-income populations. According to EPA

guidance, 10 agencies are to assess whether minority or low-income populations face risks or a rate of exposure to hazards that are significant and that "appreciably exceed or is likely to appreciably exceed the risk or rate to the general population or to the appropriate comparison group."

(EPA, 1998).

In accordance with Executive Order 12898, the Agency has considered whether the CAIR may have disproportionate negative impacts on minority or low income populations. The EPA expects the CAIR to lead to reductions in air pollution and exposures generally. Therefore, EPA concluded that negative impacts to these sub-populations that appreciably exceed similar impacts to the general population are not expected. For the same reasons, EPA is drawing the same conclusion for today's notice to reconsider certain aspects of the CAIR.

<sup>&</sup>lt;sup>10</sup> U.S. Environmental Protection Agency, 1998. Guidance for Incorporating Environmental Justice Concerns in EPA's NEPA Compliance Analyses. Office of Federal Activities, Washington, D.C., April, 1998.

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List of Subjects

40 CFR Part 51

Administrative practice and procedure, Air pollution control, Intergovernmental relations, Nitrogen oxides, Ozone, Particulate matter, Regional haze, Reporting and recordkeeping requirements, Sulfur dioxide.

40 CFR Part 96

Administrative practice and procedure, Air pollution control, Electric utilities, Nitrogen oxides, Reporting and recordkeeping requirements, Sulfur dioxide.

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Dated

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Stephen L. Johnson Administrator